

ABSTRACT

The invention in the simplest form is a system for managing distributed power sources connected to a power grid. The present invention manages power flow to/from the power grid whether for a stand-alone power source or for local area utility grid or microgrid. When two or more power sources are interconnected by the local grid, each source has a power conditioning unit and a circuit breaker manager for controlling and regulating the electric flow to/from the grid. The individual power sources are able to independently draw power from the grid when required without extensive master control schemes. In a preferred embodiment the power sources are reformer equipped fuel cells and the heat from the fuel cell is used as a heat source for efficiency.